

ABSTRACT OF THE DISCLOSURE

After forming an insulating film on an underlying layer, a resist pattern is formed on the insulating film. The insulating film is etched by using the resist pattern as a mask, thereby forming an insulating film pattern. Without removing the resist pattern, exposed portions of the underlying layer and the insulating film pattern are subjected to a plasma treatment, cleaning, a heat treatment or the like, so that a deposition grown during the formation of the insulating film pattern can be removed. Thereafter, the underlying layer is etched by using at least the insulating film pattern as a mask. As a result, even when a strict pattern rule is employed, pattern defects can be prevented from being caused in etching a multi-layer film.